ABSTRACT

ACTIVE LOAD DEVICE THAT ENABLES BIASING OF A VERY WIDE BAND DISTRIBUTED AMPLIFIER CIRCUIT WITH GAIN CONTROL

The invention relates to a very wide band amplifier circuit including a distributed amplification cell (100) connected to a biasing cell (200), the amplification cell (100) including several transistors (T1) connected in parallel between a drain line and a grid line, each terminated at one of its ends by a load (Zin, Zout), the biasing cell (200) including at least one transistor (T2) connected between a power source (V_{DD}) and the drain line of the amplification cell (100), said biasing cell having an overall impedance equal to the impedance of the load (Zout) connected to the end of the drain line of the amplification cell (100), characterized in that the grid (G2) of the transistor (T2) of the biasing cell (200) is connected to the node (201)of a divider bridge (R1R2, R1T3) so as to set its grid (G2) potential (V_{G2}), and in that the grid (G2) and the source (S2) of said transistor (T2) are connected together by means of at least one capacitor (C1, C2).

Figure 4.